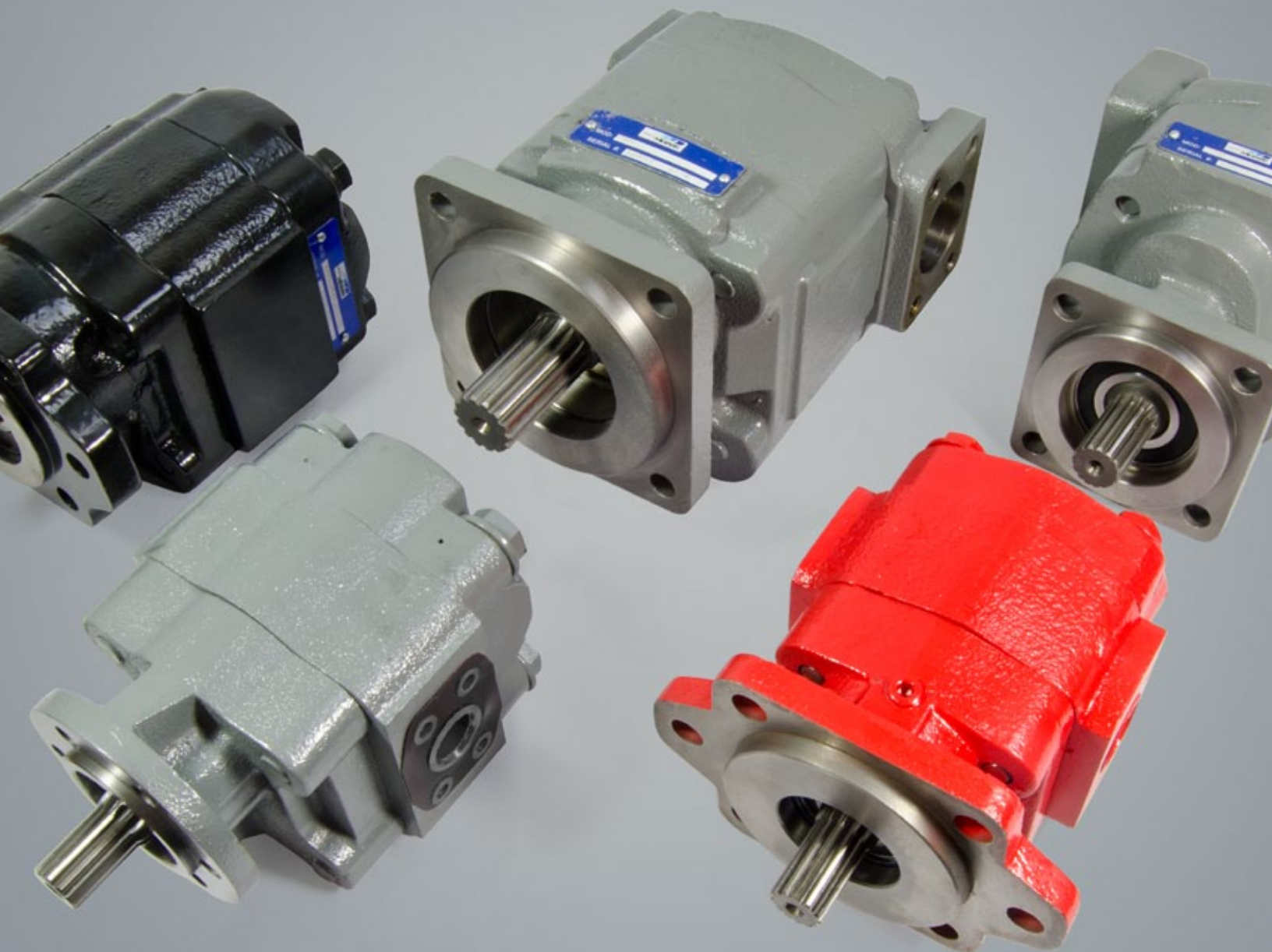


Genuine Metaris Gear Product Technical Catalog

Pumps & Components - MH Series Bearing & Bushing Style

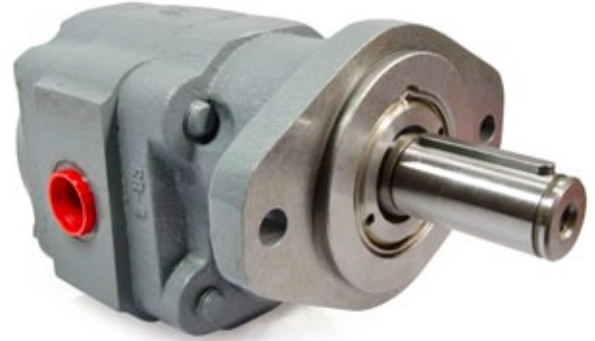


MH25 Series Bearing Pump

Features

Metaris Bearing Pumps & Motors are available in 9 models with a variety of mounting flanges, shaft configurations and porting options. Multi-section units, piggyback designs, dowelled assemblies & flow dividers are all also available. With ductile iron housings, these pumps offer pressure ratings as high as 2500 psi for the most demanding of applications.

- Heavy Duty Roller Bearing Design
- Dowelled and Rugged Cast Iron Construction
- Pressure Balanced Wear Plates
- Working Pressure up to 2500 psi
- Multiple Bearing Carrier Options
- Multiple Porting Options
- High Strength Steel Gear & Shaft Sets



Specifications

MH25		DISPLACEMENT		MAX PRESSURE	
GEAR WIDTH		IN ³ /REV	(CM ³ /REV)	PSI	BAR
.07	3/4"	1.91	(31.3)	2500	(172)
1.00	1"	2.55	(41.8)	2500	(172)
1.25	1-1/4"	3.19	(52.3)	2500	(172)
1.50	1-1/2"	3.83	(62.8)	2500	(172)
1.75	1-3/4"	4.46	(73.1)	2000	(137)
2.00	2"	5.10	(83.6)	2000	(137)
2.25	2-1/4"	5.74	(94.1)	2000	(137)
2.50	2-1/2"	6.38	(104.5)	2000	(137)

MH25 Series Bearing Pump

Pump Performance Data

SPEED RPM	GEAR WIDTH (GPM/LPM)						
	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"
900	8.5 / 32	10.5 / 39.5	13 / 49	15 / 57	17.5 / 66	20 / 75.5	22 / 83.5
1200	12 / 46.5	15 / 57	18 / 68	21 / 79.5	24 / 91	27 / 102	30 / 114
1500	15 / 57	19 / 72	23 / 87	27 / 102	31 / 117	35 / 132	39 / 146
1800	18 / 68	23 / 87	27.5 / 104	32.5 / 123	37.5 / 142	42 / 159	47 / 178
2100	21.5 / 81.5	27 / 102	32.5 / 123	38.5 / 146	44 / 167	48.5 / 187	55 / 208
2400	25 / 94.5	31 / 117	37 / 140	44 / 167	51 / 193	57 / 216	63.5 / 240

Motor Performance Data

SPEED RPM	GEAR WIDTH							
	1"		1-1/2"		2"		2-1/2"	
	INPUT FLOW (GPM/LPM)	OUTPUT TORQUE (IN/LBS / NM)	INPUT FLOW (GPM/LPM)	OUTPUT TORQUE (IN/LBS / NM)	INPUT FLOW (GPM/LPM)	OUTPUT TORQUE (IN/LBS / NM)	INPUT FLOW (GPM/LPM)	OUTPUT TORQUE (IN/LBS / NM)
800	10.5 / 40	670 / 7.5	15.5 / 58.5	1070 / 12.5	21 / 79.5	1450 / 16.5	26 / 98.5	1850 / 21.5
1200	15.5 / 58.5	680 / 8	22.5 / 85	1075 / 12.5	30.5 / 115	1450 / 16.5	37.5 / 142	1840 / 21
1600	20 / 75.5	670 / 7.5	30 / 114	1045 / 12	40 / 151	1440 / 16.5	49.5 / 187	1750 / 20
2000	25 / 94.5	660 / 7.5	37 / 140	1030 / 12	49 / 185	1415 / 16.5	61.5 / 233	1720 / 20

Note: Input Flow @ 2000psi | Output Torque @ 140 bar

MH25 PL Chart

SHAFT STYLE	INTEGRAL	TWO PIECE
SAE "BB" Spline	9,900	8,000
SAE "BB" Keyed	6,600	6,600
SAE "B" Spline	6,400	6,400
SAE "B" Keyed	5,750	5,750
SAE "C" Spline	13,850	8,000
SAE "C" Keyed	13,000	8,000
Connecting Shaft		8,000

Values based on using anti-wear type petroleum oil 150 SUS at 100° F (ISO rating of 32 cSt at 38° C) and 0 psi inlet pressure.

MH25 Series Bearing Pump

Model Code Breakdown

Repeat for Tandem Units

1 2 3 4 5 6 7 8 9 6 7 10
MHP - 25 - X - 1 - 07 - WE - AB - 10 - 25 - DH - * - * - *

Type ¹

MHP = Pump
MHM = Motor

Unit ²

X = Single or Tandem Unit w/ a Continental Shaft

Shaft End Cover ³

- 1 = Pump w/ Single Shaft Bearing (Clockwise Rotation) *Type 1 or 2*
- 2 = Pump w/ Single Shaft Bearing (Counter-clockwise Rot) *Type 1 or 2*
- 3 = Pump w/ Single Shaft Bearing (Double Rotation) *Type 1 or 2*
- 4 = Pump w/ Double Shaft Bearing (Clockwise Rotation) *Type 3*
- 5 = Pump w/ Double Shaft Bearing (Counter-clockwise Rot) *Type 3*
- 6 = Pump w/ Double Shaft Bearing (Double Rotation) *Type 3*
- 7 = Motor w/ Single Shaft Bearing & 1/4" Drain Port *Type 1 or 2*
- 8 = Motor w/ Double Shaft Bearing & 1/4" Drain Port *Type 3*
- 9 = Motor w/ Single Shaft Bearing & No Drain Port *Type 1 or 2*

Shaft End Cover ⁴

- 00 = Pad Mount (*Type 1 or 3*)
- 01 = Modified Pad Mount (*Type 1*)
- 03 = Round Flange 6-Bolt (*Type 1*)
- 04 = Round Flange 4-Bolt 2.883 Pilot (*Type 2*)
- 05 = Round Flange 6-Bolt 6.625 Pilot (*Type 2*)
- 07 = Round Flange 4-Bolt 2.883 Pilot (*Type 2*)
- 40 = 4-Bolt SQ. 3.249 Pilot (*Type 1*)
- 42 = SAE 4-Bolt "B" Mount (*Type 1 or 3*)
- 43 = SAE 4-Bolt "B" Mount w/ 2 Drains (*Type 1*)
- 78 = SAE 4-Bolt "C" Mount (*Type 1 or 3*)
- 95 = SAE 2-Bolt "B" Mount w/ 2 Drains (*Type 1*)
- 97 = SAE 2-Bolt "B" Mount (*Type 1 or 3*)
- 98 = SAE 2-Bolt "C" Mount (*Type 1*)

Port End Cover ⁵

NPT Codes

Single Units	Tandem Units	Port Size		A	B
		Left	Right		
BE BY	BI BY	None	None	n/a	n/a
FE FY	FI FY	3/4"	None	n/a	1.38
CE CY	CI CY	None	3/4"	1.38	n/a
GE GY	GI GY	3/4"	3/4"	1.38	1.38

BSPP Ring Codes

Single Units	Tandem Units	Port Size		A	B
		Left	Right		
AE AY	AI AY	3/4"	None	n/a	1.38
QE QY	QI QY	None	3/4"	1.38	n/a
SE SY	SI SY	3/4"	3/4"	1.38	1.38



O-ring Codes

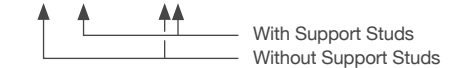
Single Units	Tandem Units	Port Size		A	B
		Left	Right		
HE HY	HI HY	1/2"	None	n/a	1.38
DE DY	DI DY	None	1/2"	1.38	n/a
JE JY	JI JY	1/2"	1/2"	1.38	1.38
UE UY	UI UY	5/8"	None	n/a	1.38
NE NY	NI NY	None	5/8"	1.38	n/a
KE KY	KI KY	3/4"	None	n/a	1.38
LE LY	LI LY	None	3/4"	1.38	n/a
ME MY	MI MY	3/4"	3/4"	1.38	1.38



Orientation is viewed from the shaft end

Metric Str. Thd Codes

Single Units	Tandem Units	Port Size		A	B
		Left	Right		
EB YB	IB YB	5/8"	None	n/a	1.38
EF YF	IF YF	None	5/8"	1.38	n/a
EV YV	IV YV	5/8"	5/8"	1.38	1.38
EE EY	EI EY	3/4"	5/8"	n/a	1.38
VE VY	VI VY	5/8"	3/4"	1.38	n/a
TE TY	TI TY	3/4"	None	n/a	1.38
WE WY	WI WY	None	3/4"	1.38	n/a
XE XY	XI XY	3/4"	3/4"	1.38	1.38



Orientation is viewed from the shaft end

Connecting Shaft ¹⁰

For connecting tandem units
1 = Connecting Shaft - Multiple Units

Bearing Carriers ⁹

See page 39 for Bearing Carrier options

Shaft Type ⁸

- 03 = 6 Tooth Spline 1.1096" Dia. x 2-1/8" Ext. (*Type 1*)
- 07 = SAE "C" 14 Tooth Spline 1.250" Dia. (*Type 1*)
- 11 = SAE "C" Keyed 1.250" Dia. (*Type 1*)
- 25 = SAE "B" 13 Tooth Spline .88" Dia. (*Type 1*)
- 30 = SAE "B" Keyed .88" Dia. 1/4" x 3/8" x 1" Key (*Type 1*)
- 38 = .8745" Dia. Keyed 1-7/16" Ext. x 1-1/4" Key (*Type 1*)
- 39 = .8745" Dia. Keyed 2-15/16" Ext. (*Type 1*)
- 43 = SAE "BB" Keyed 1" Dia. 1/4" x 3/8" x 1-1/4" Key (*Type 1*)
- 45 = .8745" Dia. Keyed 2-13/32" Ext. x 1-1/4" Key (*Type 2*)
- 47 = .9996" Dia. Keyed x 1-1/4" Ext. (*Type 2*)
- 48 = SAE "B" 13 Tooth Spline .875" Dia. (*Type 2*)
- 53 = SAE "C" 14 Tooth Spline 1.250" Dia. (*Type 2*)
- 61 = 1.250" Dia. Keyed x 1-1/2" Keyed (*Type 2*)
- 73 = 1.249" Dia. Keyed, Drilled & Tapped x 1-1/2" (*Type 2*)
- 76 = .999" Dia. Keyed Grooved x 1-1/2" Keyed (*Type 3*)

Gear Size ⁷

Code / Displacement (in³/r)

07	10	12	15	17	20	22	25
(1.91)	(2.55)	(3.19)	(3.83)	(4.46)	(5.10)	(5.74)	(6.38)

Gear Housing ⁶

See following pages for Gear Housing options

MH25 Series Bearing Pump

Model Code Breakdown Cont.

Gear Housing ⁶

- Orientation is viewed from the shaft end
- NPT Porting is NOT RECOMMENDED for pressures above 1500 psi
- Ports marked with an 'x' are recommended porting - for all other porting please consult the factory
- Shaded Cells are good for Motor units

NPT Codes

Code	Port Size		5	7	10	12	15	17	20	22	25
	Left	Right									
AB	None	None	x	x	x	x	x	x	x	x	x
AP	1/2"	None		x							
AC	None	1/2"		x							
EC	1/2"	1/2"		x	x						
ED	1/2"	3/4"		x							
EH	3/4"	1/2"		x							
AR	3/4"	None		x	x	x	x	x	x		
AF	None	3/4"		x	x	x	x	x	x		
ER	3/4"	3/4"			x	x	x	x	x	x	x
ET	3/4"	1"			x	x	x	x	x	x	x
EU	3/4"	1-1/4"						x	x		x
IJ	1"	3/4"			x	x	x	x	x	x	x
IQ	1-1/4"	3/4"						x	x		x
AT	1"	None			x	x	x	x	x	x	x
AH	None	1"			x	x	x	x	x	x	x
IL	1"	1"			x	x	x	x	x	x	x
IM	1"	1-1/4" *					x	x	x	x	x
IS	1-1/4" *	1"					x	x	x	x	x
IY	1-1/2"	1"							x	x	x
AV	1-1/4" *	None						x	x	x	x
AJ	None	1-1/4" *						x	x	x	x
IT	1-1/4"	1-1/4"						x	x	x	x
IU	1-1/4"	1-1/2" *							x	x	x
IZ	1-1/2"	1-1/4"							x	x	x
JC	1-1/2"	1-1/2"								x	x
AW	1-1/2" *	None							x	x	x
AK	None	1-1/2" *							x	x	

* Low Pressure Inlet Porting

BSPP Codes

Code	Port Size		5	7	10	12	15	17	20	22	25
	Left	Right									
AB	None	None	x	x	x	x	x	x	x	x	x
EM	None	3/4"			x	x	x				
EA	3/4"	None			x	x	x				
EJ	3/4"	3/4"			x	x	x	x	x	x	
EK	3/4"	1"			x	x					
YU	3/4"	1-1/4"			x	x	x	x			
EN	1"	3/4"			x	x					
YW	1-1/4"	3/4"			x	x	x	x			
EP	1"	None					x	x	x		
IH	None	1"					x	x	x		
EQ	1"	1"					x	x	x	x	x
ES	1"	1-1/4" *					x				
IR	1-1/4" *	1"					x	x	x	x	x
ID	1-1/2"	1"								x	
NJ	1-1/4" *	None					x	x	x		
JB	None	1-1/4" *									x
IE	1-1/4"	1-1/4"								x	
IQ	1-1/4"	1-1/2" *									x
IS	1-1/2"	1-1/4"									x
JV	1-1/2"	1-1/2"									x

* Low Pressure Inlet Porting

Metric Split Flange Codes

Code	Port Size		5	7	10	12	15	17	20	22	25
	Left	Right									
AB	None	None	x	x	x	x	x	x	x	x	x
ZQ	1"	1"					x				
ZS	1"	1-1/4"				x					
ZD	1-1/2"	1"					x				
ZE	1-1/4"	1-1/4"					x				
OA	1-1/4"	1-1/2"							x		
RF	1-1/2" *	1-1/4"						x			
RW	None	1-1/2" *						x			
RV	1-1/2"	1-1/2"									x
RG	1-1/2"	2" *									x

* Low Pressure Inlet Porting

MH25 Series Bearing Pump

Model Code Breakdown Cont.

Gear Housing Cont. ⁶

- Orientation is viewed from the shaft end
- NPT Porting is NOT RECOMMENDED for pressures above 1500 psi
- Ports marked with an 'x' are recommended porting - for all other porting please consult the factory
- Shaded Cells are good for Motor units

ORB Codes

Code	Port Size		5	7	10	12	15	17	20	22	25
	Left	Right									
AB	None	None	x	x	x	x	x	x	x	x	x
UP	1/2"	None		x	x		x				
UC	None	1/2"		x	x		x				
YC	1/2"	1/2"		x	x	x	x				
YD	1/2"	5/8"		x	x		x				
YJ	5/8"	1/2"		x	x		x				
UQ	5/8"	None			x	x	x				
UD	None	5/8"			x	x	x				
YK	5/8"	5/8"			x	x	x		x		
YL	5/8"	3/4"			x	x	x	x			
YQ	3/4"	5/8"			x	x	x	x			
UR	3/4"	None			x	x	x	x			
UF	None	3/4"			x	x	x	x			
YR	3/4"	3/4"			x	x	x	x	x	x	x
YS	3/4"	7/8"								x	
YT	3/4"	1"			x						
YX	7/8"	3/4"								x	
VJ	1"	3/4"			x						
US	7/8"	None				x	x	x	x	x	x
UG	None	7/8"				x	x	x	x	x	x
YZ	7/8"	7/8"				x	x	x	x	x	x
VC	7/8"	1"				x	x	x	x	x	x
VK	1"	7/8"				x	x	x	x	x	x
UT	1"	None				x	x	x	x	x	x
UH	None	1"				x	x	x	x	x	x
VL	1"	1"				x	x	x	x	x	x
VM	1"	1-1/4" *					x	x	x	x	x
VN	1"	1-1/2" *						x			
VS	1-1/4"	1"					x	x	x	x	x
VG	1-1/2" *	1"						x			
UV	1-1/4"	None							x	x	x
UJ	None	1-1/4"							x	x	x
VT	1-1/4"	1-1/4"							x	x	x
VU	1-1/4"	1-1/2"							x	x	x
VZ	1-1/2"	1-1/4"							x	x	x
UW	1-1/2"	None								x	
UK	None	1-1/2"								x	
WC	1-1/2"	1-1/2"									x

* Low Pressure Inlet Porting

Split Flange Codes

Code	Port Size		5	7	10	12	15	17	20	22	25
	Left	Right									
AB	None	None	x	x	x	x	x	x	x	x	x
OP	1/2"	None		x				x			
OC	None	1/2"		x				x			
ZC	1/2"	1/2"						x			
ZF	1/2"	3/4"					x	x	x	x	x
ZP	3/4"	1/2"					x	x	x	x	x
OR	3/4"	None				x	x	x	x	x	x
OF	None	3/4"				x	x	x	x	x	x
ZR	3/4"	3/4"			x	x	x	x	x	x	x
ZT	3/4"	1"			x		x	x	x	x	x
ZU	3/4"	1-1/4" *					x	x	x	x	x
RJ	1"	3/4"			x		x	x	x	x	x
RQ	1-1/4" *	3/4"					x	x	x	x	x
OT	1"	None			x	x	x	x	x	x	x
OH	None	1"			x	x	x	x	x	x	x
RL	1"	1"				x	x	x	x	x	x
RM	1"	1-1/4" *				x	x	x	x	x	x
RN	1"	1-1/2" *					x	x	x	x	x
OS	1"	2"								x	x
RS	1-1/4" *	1"				x	x	x	x	x	x
RY	1-1/2" *	1"					x	x	x	x	x
OZ	2"	1"								x	x
OV	1-1/4" *	None				x	x	x	x	x	x
OJ	None	1-1/4" *				x	x	x	x	x	x
RT	1-1/4"	1-1/4"					x	x	x	x	x
RU	1-1/4"	1-1/2" *					x	x	x	x	x
RX	1-1/4"	2" *							x	x	x
RZ	1-1/2" *	1-1/4"					x	x	x	x	x
SG	2" *	1-1/4"							x	x	x
OW	1-1/2" *	None					x	x	x	x	x
OK	None	1-1/2" *					x	x	x	x	x
SC	1-1/2"	1-1/2"						x	x	x	x
SD	1-1/2"	2" *							x	x	x
SH	2" *	1-1/2"							x	x	x
OX	2" *	None							x		
OL	None	2" *							x		











* Low Pressure Inlet Porting

MH25 Series Bearing Pump









Model Code Breakdown Cont.

Bearing Carriers ⁹









NPT Codes

In	Out	CW (Left)	CCW (Right)
None	None	 B	 B
1-1/2"	None	 TL	 TJ
1-1/2"	1"	 XS	 XT
1"	1"	 DH	 HD
1-1/4"	1-1/4"	 BF	 FB










SAE O-ring Codes

In	Out	CW (Left)	CCW (Right)
1-1/2"	None	 TH	 TM
1-1/2"	1"	 TK	 TN
1"	1"	 QD	 DQ
1-1/4"	1-1/4"	 NV	 VN

SAE Split Flange Codes

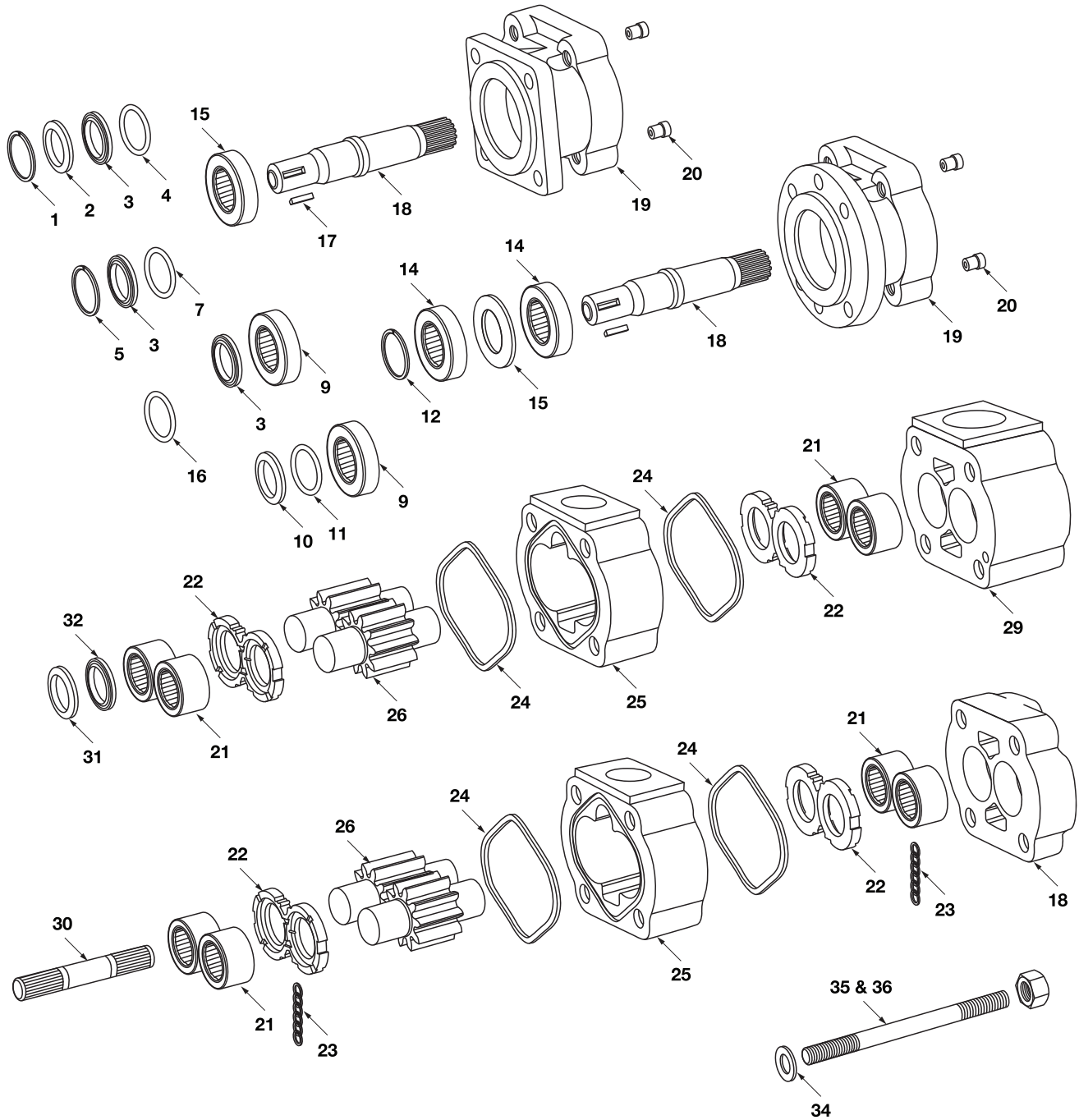
In	Out	CW (Left)	CCW (Right)
1-1/2"	None	 FB	 FT
1-1/2"	1"	 XV	 XW
1"	1"	 LP	 PL
1-1/4"	1-1/4"	 GL	 LG

Motors Only Codes

In	Out	Dual	
None	None	 B	
1"	1"	 TT	NPT
1-1/4"	1-1/4"	 VV	NPT
1-1/2"	1-1/2"	 WW	NPT
1"	1"	 CC	SAE O-Ring
1-1/4"	1-1/4"	 BB	SAE O-Ring
1-1/2"	1-1/2"	 FF	SAE O-Ring
1"	1"	 LL	SAE Split Flange
1-1/4"	1-1/4"	 MM	SAE Split Flange

MH25 Series

Parts Breakdown



MH25 Series

Parts Breakdown

DRAWING NO.	DESCRIPTION	METARIS #	ALTERNATE #
1a	RETAINER RING	A25-60-50002	391-2581-009
1b	RETAINER RING	A25-60-30001	391-2581-003
2	SEAL RETAINER	A25-60-10001	391-2584-016
3a	DOUBLE LIP PUMP SEAL (FOR TYPE 1 S.E.C.)	X83-11-03008	391-2883-055
3b	HI PRESSURE SHAFT SEAL (FOR TYPE 1 S.E.C.)	X84-36-03009	391-2883-096
3c	PUMP LIP SEAL (FOR TYPE 2 S.E.C.)	X83-11-02508	391-2883-057
3d	DOUBLE LIP PUMP SEAL TYPE 3 TYPE	X83-11-03508	391-2883-052
3e	MOTOR SHAFT SEAL FOR TYPE 1 S.E.C.)	X84-36-03009	391-2883-096
4	O RING	X81-11-05704	391-2881-120
5	RETAINER RING TYPE 3	A25-60-50001	391-2581-001
7	O RING (L 3006-47)	X81-11-06304	391-2881-141
8a	BEARING SLEEVE	A25-60-30003	391-3281-004
8b	BEARING SLEEVE	A25-60-30002	391-2584-024
9	SHAFT ROLLER BEARING	X03-24-12541	391-0381-058
10	SHAFT SEAL BACK UP RING	A25-82-46020	391-2681-248
11	SHAFT SEAL O RING	X81-11-02504	391-2881-261
12	RETAINING RING TYPE 2	X05-03-56200	391-2686-063
13	SHAFT BEARING RACE	X03-40-12552	391-0383-001
14	THRUST BEARING	X03-40-12552	391-0383-002
15	THRUST WASHER	X03-33-13064	391-0384-008
Not Shown	TAPERED ROLLER BEARING SPACER TYPE 3	A25-92-51640	391-3381-007
16	BEARING SLEEVE O RING	X81-11-04403	391-2881-203
17a	DRIVE KEY TYPE 30 & 70 SHAFT	X01-01-61025	391-1781-025
17b	DRIVE KEY TYPE 2 & 84 SHAFT	X01-01-61044	391-1781-020
17c	DRIVE KEY TYPE 20 & 43 & 47 & 52 SHAFT	X01-01-61032	391-1781-021
17d	DRIVE KEY TYPE 38 & 39 & 45 SHAFT	X01-01-50732	391-1781-027
17e	DRIVE KEY TYPE 11 & 61 & 101 SHAFT	X01-01-81238	391-1781-045
17f	DRIVE KEY TYPE 58 SHAFT	X01-01-50719	391-1781-032
17g	DRIVE KEY TYPE 73 SHAFT	X01-01-81257	391-1781-008
17h	DRIVE KEY TYPE 76 SHAFT	X01-01-61038	391-1781-019
Not Shown	0.133" THICK SPACER FOR TYPE 3 SHAFTS	A25-92-25392	391-3383-016
Not Shown	0.128" THICK SPACER FOR TYPE 3 SHAFTS	A25-92-25391	391-3383-015
Not Shown	SHAFT BEARING RETAINING RING	X05-02-28110	391-2685-011
18a	13 Tooth spline 0.873" dia. 16/32 pitch (TYPE 25) TYPE 1	A25-50-00221	303-1135-028
18b	SAE B KEYED 7/8" dia. (KEY SIZE 0.25" W X 1" L) (TYPE 30) TYPE 1	A25-50-00121	303-1135-001
18c	KEYED 1.1247" dia.(KEY SIZE 1/4" X 3/8" X 1 3/4") (TYPE 2) TYPE 1	A25-50-00151	303-1135-032
18d	6 Tooth Spline 1.109" dia. .275" tooth (TYPE 3) TYPE 1	A25-50-00791	303-1135-002

MH25 Series

Parts Breakdown

DRAWING NO.	DESCRIPTION	METARIS #	ALTERNATE #
18e	6 Tooth Spline 1.120" dia. .275" tooth (TYPE 6) TYPE 1	A25-50-00751	303-1135-035
18f	6 Tooth Spline 1.120" dia. grooved .275" tooth (TYPE 19) TYPE 1	A25-50-00759	303-1135-057
18g	KEYED 0.9846" dia. (KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 20) TYPE 1	A25-50-00174	303-1135-010
18h	KEYED 0.8745" dia. (KEY SIZE 3/16" X 9/32" X 1 1/4") (TYPE 38) TYPE 1	A25-50-00124	303-1135-030
18i	KEYED 0.8745" dia. (KEY SIZE 3/16" X 9/32" X 1 1/4") (TYPE 39) TYPE 1	A25-50-00129	303-1135-031
18j	6 Tooth Spline 0.8730" dia. .214" tooth (TYPE 40) TYPE 1	A25-50-00721	303-1135-006
18k	6 Tooth Spline 0.9846" dia. .246" tooth (TYPE 42) TYPE 1	Special Order	303-1135-037
18l	KEYED .9996" dia. (KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 43) TYPE 1	A25-50-00131	303-1135-012
18m	14 Tooth Spline 1.228" dia. 12/24 pitch -SAE C Spline (TYPE 7) TYPE 1	A25-50-00241	303-1135-021
18n	KEYED 1.249" dia. (KEY SIZE 5/16" X 15/32" X 1 1/2") (TYPE 11) TYPE 1	A25-50-00141	303-1135-023
18o	17 Tooth Spline 1.249" dia. 16/32 pitch (TYPE 49) TYPE 1	Special Order	303-1135-014
18p	KEYED 0.9846" dia. (KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 52) TYPE 1	A25-50-00171	303-1135-009
18q	6 Tooth Spline 1.248" dia. .236" tooth (TYPE 63) TYPE 1	A25-50-00741	303-1135-033
18r	6 Tooth Spline 0.9997" dia. .248" tooth (TYPE 94) TYPE 1	A25-50-00731	303-1135-058
18s	KEYED 0.8745" dia. (KEY SIZE 3/16" X 9/32" X 1 1/4") (TYPE 45) TYPE 2	A25-50-00122	303-1135-015
18t	6 Tooth Spline 0.9846" dia. .246" tooth (TYPE 46) TYPE 2	A25-50-00772	303-1135-013
18u	KEYED 0.9996" dia. (KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 47) TYPE 2	A25-50-00132	303-1135-011
18v	13 Tooth spline 0.873" dia. 16/32 pitch (TYPE 48) TYPE 2	A25-50-00222	303-1135-004
18w	14 Tooth Spline 1.248" dia. 12/24 pitch -SAE C Spline (TYPE 53) TYPE 2	A25-50-00242	303-1135-062
18x	14 Tooth Spline 1.248" dia. 12/24 pitch (TYPE 55) TYPE 2	A25-50-00249	303-1135-007
18y	KEYED 0.7495" dia. (KEY SIZE 3/16" X 9/32" X 7/8") (TYPE 58) TYPE 2	A25-50-00162	303-1135-022
18z	KEYED 1.250" dia. (KEY SIZE 5/16" X 15/32" X 1 1/2") (TYPE 61) TYPE 2	A25-50-00142	303-1135-029
18aa	KEYED 0.9846" dia. (KEY SIZE 1/4" X 3/8" X 1") (TYPE 70) TYPE 2	A25-50-00172	303-1135-040
18bb	6 Tooth Spline 0.8730" dia. .214" tooth (TYPE 99) TYPE 2	A25-50-00722	303-1135-072
18cc	KEYED 1.250" dia. + Int. Thread 1/2" -13 Thd (double brg.) (TYPE 73) TYPE 3	A25-50-00143	303-1135-049
18dd	KEYED 0.999" dia. grooved (KEY SIZE 1/4" X 3/8" X 1 1/2") (TYPE 76) TYPE 3	A25-50-00133	303-1135-019
18ee	6 Tooth Spline 1.1235" dia. grooved .277" tooth (TYPE 82) TYPE 3	Special Order	303-1135-041
18ff	KEYED 0.8745" dia. Grooved (KEY SIZE .311" X .124" X 1.187") (TYPE 83) TYPE 3	Special Order	303-1135-038
18gg	KEYED 1.1247" dia. (KEY SIZE 1/4" X 3/8" X 1 3/4") (TYPE 84) TYPE 3	A25-50-00153	303-1135-047
18hh	KEYED 1.250" dia. (KEY SIZE .31" X .47" X 1.50") (TYPE 101) TYPE 3	Special Order	303-1500-501
19a	25 S.E.C. PAD MOUNT PUMP TYPE 1 TYPE 100 / 200 / 300	A25-10-21100	303-5011-202
19b	25 S.E.C. MODIFIED PAD MOUNT PUMP TYPE 1 TYPE 101 / 201 / 301	A25-10-41101	303-5011-401
19c	25 S.E.C. 2 BOLT B MOUNT (SPL.) TYPE 1 TYPE 102 / 202 / 302 (4" or 101.6 mm pilot)	A25-10-21222	303-5021-205
19d	25 S.E.C. 6 BOLT ROUND 3.148" PILOT TYPE 1 TYPE 103 / 203 / 303	A25-10-21650	303-5041-201
19e	25 S.E.C. 4 BOLT SQ 4.748" PILOT TYPE 1 TYPE 106 / 206 / 306	Special Order	303-5031-203
19f	25 S.E.C. 4 BOLT SQ 3.249" PILOT TYPE 1 TYPE 140 / 240 / 340	Special Order	303-5031-406
19g	25 S.E.C. 4 BOLT SQ 3.748 PILOT TYPE 1 TYPE 141 / 241 / 341	Special Order	303-5031-402

MH25 Series

Parts Breakdown

DRAWING NO.	DESCRIPTION	METARIS #	ALTERNATE #
19h	25 S.E.C. 4 BOLT B MOUNT TYPE 1 TYPE 142 / 241 / 342 (4" or 101.6 mm pilot)	A25-10-21420	303-5031-201
19i	25 S.E.C. 4 BOLT C MOUNT TYPE 1 TYPE 178 / 278 / 378 (5" or 127 mm pilot)	A25-10-21430	303-5031-202
19j	25 S.E.C. 2 BOLT B MOUNT TYPE 1 TYPE 197 / 297 / 397 (4" or 101.6 mm pilot)	A25-10-21221	303-5021-203
19k	25 S.E.C. 2 BOLT C MOUNT TYPE 1 TYPE 198 / 298 / 398 (5" or 127 mm pilot)	A25-10-21231	303-5021-204
19l	25 S.E.C. PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 700	A25-10-41102	303-5011-404
19m	25 S.E.C. MODIFIED PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 701	Special Order	303-5011-403
19n	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 742 (4" or 101.6 mm pilot)	A25-10-41422	303-5031-407
19o	25 S.E.C. 4 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 778 (5" or 127 mm pilot)	A25-10-41430	303-5031-403
19p	25 S.E.C. 2 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 797 (4" or 101.6 mm pilot)	A25-10-41222	303-5021-403
19q	25 S.E.C. 2 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 798 (5" or 127 mm pilot)	A25-10-41232	303-5021-405
19r	25 S.E.C. PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 900	A25-10-21100	303-5011-202
19s	25 S.E.C. MODIFIED PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 901	A25-10-41101	303-5011-401
19t	25 S.E.C. 2 BOLT B MOUNT (SPL.) WITH DRAIN TYPE 1 TYPE 902	A25-10-21222	303-5021-205
19u	25 S.E.C. 6 BOLT ROUND 3.148" PILOT WITH DRAIN TYPE 1 TYPE 903	A25-10-21650	303-5041-201
19v	25 S.E.C. 4 BOLT SQ 4.748" PILOT WITH DRAIN TYPE 1 TYPE 906	Special Order	303-5031-203
19w	25 S.E.C. 4 BOLT SQ 3.748" PILOT WITH DRAIN TYPE 1 TYPE 941	Special Order	303-5031-402
19x	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 942 (4" or 101.6 mm pilot)	A25-10-21420	303-5031-201
19y	25 S.E.C. 4 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 978 (5" or 127 mm pilot)	A25-10-21430	303-5031-202
19z	25 S.E.C. 2 BOLT C WITH 2 DRAINS TYPE 1 TYPE 993 (5" or 127 mm pilot)	A25-10-41231	303-5021-404
19aa	25 S.E.C. 2 BOLT B WITH 2 DRAINS TYPE 1 TYPE 995 (4" or 101.6 mm pilot)	A25-10-41221	303-5021-402
19bb	25 S.E.C. 2 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 997 (4" or 101.6 mm pilot)	A25-10-21221	303-5021-203
19cc	25 S.E.C. 2 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 998 (5" or 127 mm pilot)	A25-10-21231	303-5021-204
19dd	25 S.E.C. 6 BOLT ROUND 2.625" PILOT TYPE 2 TYPE 305	A25-10-22650	303-5043-202
19ee	25 S.E.C. 4 BOLT ROUND 2.883" PILOT TYPE 2 TYPE 304	A25-10-22452	303-5043-204
19ff	25 S.E.C. 4 BOLT ROUND 2.883" PILOT TYPE 2 TYPE 307 (53 25 SHAFT)	A25-10-22451	303-5043-203
19gg	25 S.E.C. 6 BOLT ROUND 2.625" WITH DRAIN PILOT TYPE 2 TYPE 705	A25-10-42650	303-5043-404
19hh	25 S.E.C. 6 BOLT ROUND 2.625" PILOT WITH DRAIN TYPE 2 TYPE 905	A25-10-22650	303-5043-202
19ii	25 S.E.C. 4 BOLT ROUND 2.883" PILOT WITH DRAIN TYPE 2 TYPE 904	A25-10-22452	303-5043-204
19jj	25 S.E.C. 4 BOLT ROUND 2.883" PILOT WITH DRAIN TYPE 2 TYPE 907	A25-10-22451	303-5043-203
19kk	25 S.E.C. PAD MOUNT PUMP WITH DRAIN TYPE 3 TYPE 600 / 800	A25-10-23100	303-5012-201
19ll	25 S.E.C. 4 BOLT C MOUNT WITH DRAIN TYPE 3 TYPE 678 / 878 (5" or 127 mm pilot)	A25-10-23430	303-5039-204
19mm	25 S.E.C. 2 BOLT B MOUNT WITH DRAIN TYPE 3 TYPE 697/897 (4" or 101.6 mm pilot)	A25-10-23220	303-5022-202
19nn	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 3 TYPE 842 (4" or 101.6 mm pilot)	A25-10-23420	303-5022-201
19oo	25 S.E.C. 4 BOLT B MOUNT WITH 2 DRAINS TYPE 3 TYPE 843 (4" or 101.6 mm pilot)	A25-10-41421	303-5022-401
19pp	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 3 TYPE 642 (4" or 101.6 mm pilot)	A25-10-23420	303-5022-201
20a	CHECK VALVE	A00-75-11000	391-3681-001
20b	PRESSURE PLUG	X02-03-32110	391-2286-004

MH25 Series

Parts Breakdown

DRAWING NO.	DESCRIPTION	METARIS #	ALTERNATE #
21	ROLLER BEARING (Ø 1.625" O.D.)	X03-24-13349	391-0381-059
22	PUMP & MOTOR THRUST PLATE	A25-70-10000	391-2185-012
23	POCKET SEAL	X85-11-00002	391-2882-050
24	PUMP & MOTOR HOUSING GASKET	X85-11-10803	391-2884-021
25	PUMP & MOTOR GEAR HOUSING	A25-32-XX000	303-80XX-100
26	GEAR SET ONLY	A25-50-XX000	303-28XX-000
27	ROLL PIN	A00-94-30310	391-2084-020
28	SHAFT BUSHING TYPE 3	X03-00-32531	391-0481-003
29a	PUMP BEARING CARRIER WITH COMMON PASSAGE	A25-40-20000	303-7383-100
29b	MOTOR BEARING CARRIER BLANK	A25-40-00000	303-7300-100
30	CONNECTING SHAFT	A25-50-00500	303-1133-001
31	SHAFT BUSHING	X03-00-32532	391-0481-002
32	CONICAL SPRING	A25-95-00000	391-3581-176
33	PUMP & MOTOR PORT END COVER	A25-22-00000	303-3100-100
34	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
35	BOLT & STUDS (5/8"-UNC)	See Fasteners Page	
36	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
Not Shown	CASE DRAIN PLUG 1/4" NPT	X02-03-22060	391-2282-056
Not Shown	INPUT SHAFT SNAP RING FOR TYPE 2 SHAFTS	X05-04-23170	391-2688-012
Not Shown	INPUT SHAFT THRUST WASHER USED WITH TYPE 2 SHAFTS	X45-10-27002	391-3785-005
Not Shown	INPUT SHAFT RETAINER RING FOR TYPE 2 SHAFTS	A25-60-20000	391-2585-001

Note: The **XX** shown in the part number is in place of the size - the true value must be placed into the part number when ordering parts.

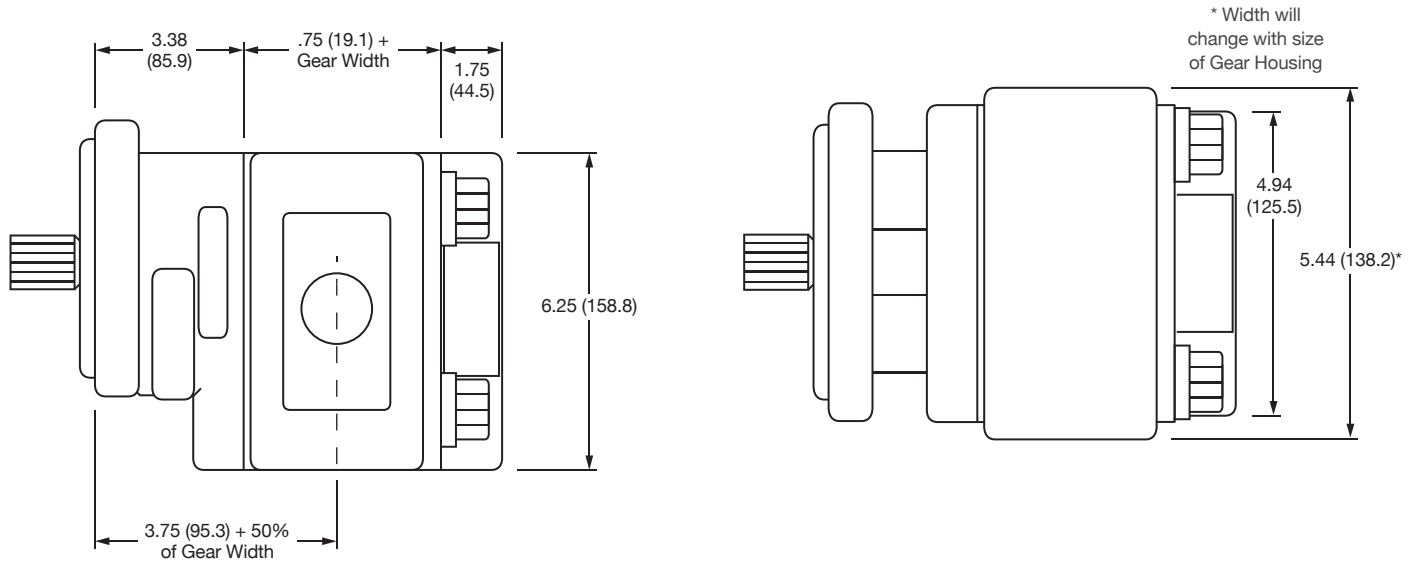
For example: Gear set no. A25-50-XX000 changes to A25-50-15000 for 1.5" gear size
 Housing no. A25-32-XX000 changes to A25-32-15000 for a 1.5" housing size
 No porting sizes have been indicated all porting must be specified when ordering parts.

MH25 Series

Dimensions

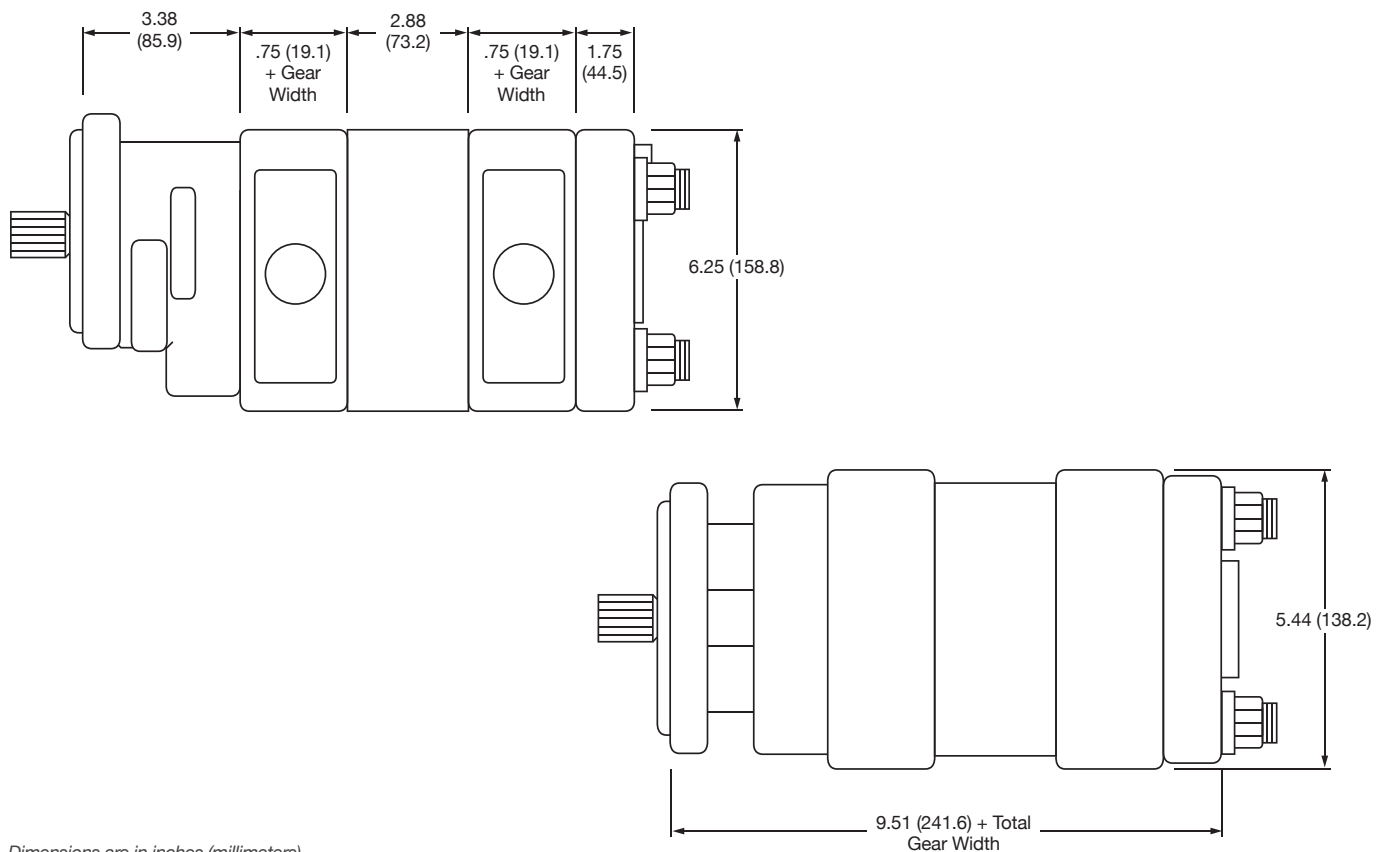
Single Unit

* Shaft dimension will change with the type of shaft used.



Multiple Unit

* Shaft dimension will change with the type of shaft used.



Dimensions are in inches (millimeters).